



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,126	03/11/2004	Avi Kopelman	25537Y	4668
20529	7590	03/02/2006		
NATH & ASSOCIATES			EXAMINER	
112 South West Street				WILSON, JOHN J
Alexandria, VA 22314			ART UNIT	PAPER NUMBER
			3732	

DATE MAILED: 03/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/797,126	KOPELMAN ET AL.
	Examiner	Art Unit
	John J. Wilson	3732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 03 January 2006.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-20 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-20 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In claim 1, “discontinuing obtaining of said virtual representation and discontinuing processing of said virtual representation”, “after said discontinuing obtaining of said virtual representation and said discontinuing processing of said virtual representation, using a reproduction of a stored display” is new matter not supported by the original disclosure. The amendments to claims 11 and 18 contain similar new matter. In claim 20, “while placing one or more real brackets directly on corresponding one or more teeth of said individual” is not found in the disclosure as originally filed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 9, 11, 12 and 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taub et al (WO 99/16380) in view of Jordan et al (6152731) and Diamond (4850864). Taub shows using a virtual image of at least one tooth and of the orthodontic element in proper position thereon and teaches the virtual image is used on a display and used as a guide while placing an orthodontic element on the patient, page 5, lines 8-14. Taub does not specifically state that the virtual guide is displayed in three dimensions. Jordan teaches displaying in three dimensions, column 8, lines 50-53. It would be obvious to one of ordinary skill in the art to modify Taub to include displaying in three dimensions in order to better view the teeth and orthodontic elements. The above combination does not show discontinuing obtaining the image and using a reproduction of a stored image. Diamond teaches storing an image and using the stored image for further processing, column 14, lines 46-53. It would be obvious to one of ordinary skill in the art to modify to modify the above combination to include using a stored image as shown by Diamond in order to make use of an art well known alternative of using a live image or a stored image. To use different viewpoints is an obvious matter of choice in views used to one of ordinary skill in the art. To use different sets of teeth is an obvious matter of choice in the teeth it is desired to work on to the skilled artisan. As to claim 5, Taub is used to help place brackets, to display in order of bracket placement would be obvious to one of ordinary skill in the art.

Claims 7 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taub et al (WO 99/16380) in view of Jordan et al (6152731) and Diamond (4850864) and further in view of Hamilton (6413083). The above combination shows the elements as described above,

however, does not show the use of a printer. Hamilton teaches using a printer 108. It would be obvious to one of ordinary skill in the art to modify the above combination to include printing information as is well known and shown and suggested by Hamilton in order to make use of known ways of communicating in the art.

Claims 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taub et al (WO 99/16380) in view of Jordan et al (6152731) and Diamond (4850864), and further in view of Chishti et al (6227850). The above combination teaches the elements as described above, however, does not show transmitting data to a remote location. Chishti teaches using a remote location, column 14, lines 35-45. It would be obvious to one of ordinary skill in the art to modify the above combination to include using a remote location as shown by Chishti in order to more conveniently provide orthodontic planning.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Taub et al (WO 99/16380) in view of Jordan et al (6152731) and Diamond (4850864), and further in view of Sachdera et al (6350120). The above combination shows the elements as described above, however, does not show the use of a database of virtual brackets. Sachdera teaches using a library of virtual brackets, column 6, lines 25-31. It would be obvious to one of ordinary skill in the art to modify the above combination to include using a database of virtual brackets as shown by Sachdera in order to better simulate the brackets intended to be placed on the teeth.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Taub et al (WO 99/16380) in view of Jordan et al (6152731) and Sachdera et al (6350120). Taub shows using a virtual image of at least one tooth and of the orthodontic element in proper position thereon and teaches the virtual image is used on a display and used as a guide while placing an orthodontic element on the patient, page 5, lines 8-14. Taub does not specifically state that the virtual guide is displayed in three dimensions. Jordan teaches displaying in three dimensions, column 8, lines 50-53. It would be obvious to one of ordinary skill in the art to modify Taub to include displaying in three dimensions in order to better view the teeth and orthodontic elements. The above combination does not show the use of a database of virtual brackets. Sachdera teaches using a library of virtual brackets that represent standard brackets, column 6, lines 25-31. It would be obvious to one of ordinary skill in the art to modify the above combination to include using a database of virtual brackets as shown by Sachdera in order to better simulate the brackets intended to be placed on the teeth.

Response to Arguments

Applicant's arguments filed January 3, 2006 have been fully considered but they are not persuasive. With respect to the above new matter rejection, the citations of support made by applicant in the remarks do not show the new limitations claimed. Applicant should be more specific as to how these citations teach the new claim language. With respect to applicant's argument that the prior art does not show discontinuing, this argument is held to be moot in view of the newly applied rejection using Diamond above.

Conclusion

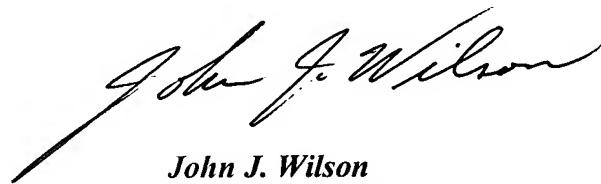
Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Wilson whose telephone number is 571-272-4722). The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin P. Shaver, can be reached at 571-272-4720. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John J. Wilson
John J. Wilson
Primary Examiner
Art Unit 3732

jjw
February 24, 2006